

MTC Regional Transit Hub Performance Review Project

## HUB REVIEW FINDINGS - PALO ALTO STATION

**Date of Hub Review:**  
October 20, 2006

**Participants:**

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**Existing Hub Conditions:**

The Palo Alto Train Station has been in existence and providing Peninsula train service operating for more than seventy years, though it has been upgraded and modernized in recent years. Earthquake safety improvements are just being completed on the existing train depot building; approximately two years ago, a new bus transit center was completed adjacent to the depot building on the west side of the station. In addition to the bus transit center, several buses and shuttles stop along Alma Street on the eastside (downtown) of the Palo Alto Station. The City and Caltrain are planning major accessibility improvements in the next several years that will improve access to the station from the downtown area.

## CORRECTIVE ACTIONS

**WAYFINDING:**

The station and the bus transit center host an eclectic mix of old and new signs. While it is possible to find one's way around the station, an integrated wayfinding sign program does not exist to direct passengers to all of the facilities or transit information locations. A new wayfinding sign program would create a consistent, easy to read, easy to find, hierarchical set of information to direct passengers between the multiple entries/exits and transit services in a convenient and accessible manner.

Wayfinding program corrective actions should include but not be limited to:

**Identification of station or transit operator**

- "Station entrance" signs at the front and side of the station and on the east side of the station along Alma Street (see checklist question #1, photos #1-3);
- "Station entrance" signs from El Camino, Quarry Road and at the pedestrian tunnels (see checklist question #2, photos #4, 7-8);
- "Station entrance" signs from the parking lots on both the east and west sides of the station (see checklist questions #3, 17);
- Entrance signs should include station name and operator logos.

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### Moving around or entering or exiting the station

- Install directional signs at all decision points in the hub to direct passengers between Caltrain, VTA, AC Transit and Samtrans bus platforms, Marguerite (Stanford) and Palo Alto downtown shuttle stops, ticket machines, RTIC's, and bicycle facilities;
  - Station entries/exits on University and Alma (photos #1-2);
  - Station depot building;
  - Station platforms;
  - Bus intermodal facility;
  - Pedestrian tunnels on east and west sides (photos #7-8);
  - Shuttle stops (photos #6, 10);
  - Parking lots on east and west sides;
  - RTIC and ticket machines;
- Provide exiting directions to surrounding streets, off-site transit services and local destinations (photos #5-7);
- Use a consistent set of graphics, fonts and colors for directional signs (see checklist #8-10, 14);
- Include operator logos on all directional signs (see checklist question #6);
- Use a consistent set of arrows with a bold design at all decision points (see checklist question #16);
- Add international icons and symbols where appropriate;
- Incorporate the wayfinding sign program into the accessible improvements that are currently planned for this hub facility;
- MTC will work with a transit operator who will take the lead on the development of a comprehensive and consistent wayfinding sign program, including providing funding for program development and P S & E costs.

### Identification of where to board or wait for transit

- Bus loading areas are well-marked at the new bus transit center. No corrective actions are needed (see checklist question #17, photo #15);
- Add bolder Caltrain directional information to correct platform (see checklist question #18, photos #6, 8);
- Install signage to off-site bus boarding areas (see checklist question #25, photo #20).

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### CUSTOMER INFORMATION:

Customer information is currently dispersed throughout the hub in a variety of formats to varying degrees of accuracy. A new wayfinding sign program as described in the previous paragraph would incorporate a total package of customer service information and displays that would be consistent and installed at centralized locations within the facility. The new program would address these corrective actions.

#### Regional Transit Information (RTIC)

An RTIC is located in the breezeway of the station (photos #16-18).

- The existing RTIC should be redesigned and upgraded with consistent graphics, message and hierarchy of information that includes:
  1. The regional 511.org transit map; and
  2. Subregional or system map for local operators (see checklist questions #26, 27).
- A new RTIC should be incorporated into the redesign of the east entrance (Alma St) of this facility (photo #2);
- An additional RTIC could be provided at the bus transfer facility (photo #11-12);
- The location of the RTIC should be integrated into the wayfinding sign program (see checklist question #28).

#### Local Transit Information

- Establish three or four locations in the hub where local transit information is provided including (see checklist questions #28 - 32):
  1. Subregional or system map for local operators;
  2. Schedules and service hours;
  3. Fares and specific system information;
  4. Hub layout map; and
  5. Local vicinity map.
- Include the location of off-site bus stops on the local vicinity map and schedules for these services with other local transit information (see checklist question #11);
- Provide map of Samtrans bus service at their bus stops (see checklist question #31).

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**REAL-TIME SIGNAGE:**

**Existing Real-Time Signage**

- The variable-message signs on Caltrain platforms provide scheduled arrival information. Real-time information is provided in the event of service delays. (photo #19).

**Future Real-Time Signage Installations**

- Add real-time signs on Alma Street bus stops once the City has completed accessibility improvements on that side of the station (see checklist question #38);
- Install real-time signs at the bus transit center that list all of the bus and shuttle services at this hub by operator (see checklist question #38);
- Add real-time sign hardware into the design of the pedestrian tunnel accessibility improvements (see checklist question #38);
- Work with Caltrain to complete the real-time signage project at this and other Caltrain stations.

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STATION PHOTOGRAPHS



1. Entry signs to Palo Alto Station. Note the inconsistent operator logos and sign styles.



2. Entry from Alma Street.



3. Station identification on train platform.

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4. Wayfinding signage at new bus terminal.



5. Wayfinding signage from bus terminal to surrounding destinations.



6. Wayfinding signage from train station. Note inconsistency of Stanford/Marguerite Shuttle name.



7. Tunnel entrance to opposite train platform or adjacent streets. Note lack of directional signage.



8. Directional signage in pedestrian tunnel.



9. Caltrain schedule information at platform.

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10. Marguerite shuttle loading area.



11. VTA information at bus terminal.

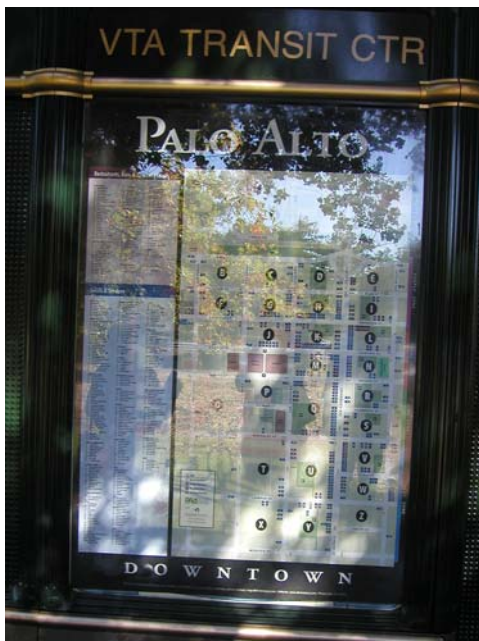


12. VTA schedule information at bus terminal.



13. Local Palo Alto map on public toilet near bus terminal.

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14. Close-up of Palo Alto map.



15. Bus stop signs at bus terminal.  
Note use of operator logos.



16. Regional Transit Information Map in RTIC.



17. Bus destination and loading area map.

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18. Bus, LRT and shuttle schedule with accompanying maps.



19. Variable message sign at Caltrain Platform.



20. Adjacent bus stop on Alma St.

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Hub Review Checklist Summary			
			WAYFINDING
Yes	No	N/A	
			Identification of station or transit operator
2	4		1. The hub is clearly identified, visible from surrounding roadways by vehicular and pedestrian traffic. <ul style="list-style-type: none"> <li>Minimal and inconsistent signs for those driving to the station.</li> <li>Station is not visible from Quarry Road entrance.</li> <li>No signs on Alma Street on the east side of the station.</li> <li>No signs for pedestrian access from El Camino on west side of station.</li> </ul>
1	5		2. Entrances into the hub are clearly identified, visible from approaches by vehicular and pedestrian traffic. <ul style="list-style-type: none"> <li>No signs at Lytton and Alma Street entrances.</li> <li>No signs at Quarry Road entrance.</li> <li>Need signs at pedestrian tunnel entrances.</li> </ul>
2	5		3. Transit operators serving the hub are clearly identified at the entrances with their logo and name. <ul style="list-style-type: none"> <li>Yes for Caltrain, Samtrans, VTA and Marguerite shuttle.</li> <li>No for Dumbarton DB and Amtrak bus and parking lot on Alma.</li> <li>Small names and inconsistent use of logos.</li> </ul>
2	1		4. Station identification reinforces information on printed maps and schedules. <ul style="list-style-type: none"> <li>VTA transit center is not consistent with Palo Alto name.</li> </ul>
4	4		5. Station name is identified on the entrance sign along with agency logo. <ul style="list-style-type: none"> <li>Yes from Urban Lane.</li> <li>No from Alma and Lytton.</li> <li>No Palo Alto signs at transit center, station seems isolated.</li> <li>No Samtrans logo; install new signs at transit center.</li> </ul>
			Moving around or entering or exiting the station
Yes	No	N/A	
3	4		6. Agency logos are included with names on directional signs within the facility. <ul style="list-style-type: none"> <li>No Amtrak bus information.</li> <li>Operator logos are not prominent or repeated within the hub.</li> </ul>
1	3		7. Turnstile level street exit directional signs also include connection agency names and logos.

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5	1		<p>8. Vital connections information is grouped together on signs.</p> <ul style="list-style-type: none"> <li>• Yes, but only at RTIC</li> <li>• Pedestrian tunnel entrances and exits have little information or inconsistent information.</li> <li>• Does not include Amtrak bus and Palo Alto shuttle information.</li> </ul>
2	3		<p>9. Connection directions are provided at each decision point and there are no gaps in the connection directional information flow.</p> <ul style="list-style-type: none"> <li>• Okay to bus platforms.</li> <li>• Not good to train platforms.</li> <li>• Need better signs to trains and parking lots.</li> <li>• Some signs, but many gaps.</li> </ul>
1	3		<p>10. Exiting directional signs list a hierarchy of the popular destinations and connecting services to reach these destinations.</p> <ul style="list-style-type: none"> <li>• Generally good, but inconsistent directional information.</li> </ul>
0	3	1	<p>11. Where connecting transit service is not within the station, clear directional signage (including walking distance) is provided to these services. All sign placement complies with 2004 ADAAG guidelines.</p> <ul style="list-style-type: none"> <li>• No directional signs to Amtrak and DB bus on Alma.</li> </ul>
1	2	1	<p>12. In stations with multiple track/gate or train/ferry service, confirmation of agency, destination, and real-time departure is associated with those services.</p>
4	0		<p>13. Clear sightlines are maintained to signs and all sign placement complies with 2004 ADAAG guidelines.</p> <ul style="list-style-type: none"> <li>• Yes for the most part, but some accessible route signs are not correct.</li> </ul>
0	4		<p>14. Exiting connection information is color-coded to emphasize and make it easier to find directions and connections.</p> <ul style="list-style-type: none"> <li>• Consider using colors for new wayfinding sign program.</li> </ul>
4	1		<p>15. Signs are legible with adequate message size appropriate for viewing distance, proper contrast ratios, and illumination levels.</p> <ul style="list-style-type: none"> <li>• Need larger print at bus platforms.</li> </ul>
1	4		<p>16. Arrows are of consistent design and are bold in visual balance with text and are closely associated with their messages.</p> <ul style="list-style-type: none"> <li>• Arrows are not consistent and not clear enough.</li> <li>• At least three different styles of arrows. Some have good visibility.</li> </ul>

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			Identification of where to board or wait for transit
Yes	No	N/A	
4	1		<b>17.</b> Transit boarding platforms are clearly and boldly identified. <ul style="list-style-type: none"> <li>• Good identification at the new bus transit center.</li> <li>• No signs for southbound Caltrain platform, but clear signage on the northbound platform.</li> <li>• No signs directing passengers from parking lots to station.</li> </ul>
4	1	1	<b>18.</b> Where a particular transit route utilizes different boarding points for opposite directions of travel, directional signage is provided to the different boarding point including platform route number, name, and route terminus (a place name). <ul style="list-style-type: none"> <li>• Yes for Caltrain northbound.</li> <li>• No platform signs to help passengers.</li> <li>• Unclear in new bus transit center.</li> </ul>
4	1		<b>19.</b> At commuter rail, ferry terminals or bus stations, the boarding area identification number is large and bold with service agency, destination, number, and "real-time" departure is provided. <ul style="list-style-type: none"> <li>• No real-time information.</li> <li>• Signs are not comprehensive. Sometimes only connecting information or arrows inconsistent and very confusing.</li> </ul>
5	0		<b>20.</b> Schedule frequency and last departure information are provided at transit boarding platforms and are consistent with 2004 ADAAG guidelines. <ul style="list-style-type: none"> <li>• Yes on platforms but not near bus stops.</li> <li>• No consistent placement.</li> </ul>
4	0		<b>21.</b> Bus stop signs have agency logos large and bold. <ul style="list-style-type: none"> <li>• Signs are medium, not large or bold. Could be improved.</li> </ul>
2	1	1	<b>22.</b> Bus stop signs have accessibility and parking restrictions as auxiliary signs below the basic bus stop signs.
3	0		<b>23.</b> Bus route identification on bus stop signs comply with 2004 ADAAG Guidelines - minimum 2" route number character height.
4	0		<b>24.</b> Bus stop sign faces are visible from each approach direction.
3	1		<b>25.</b> Bus shelters have associated bus stop signs which are consistent with the design guidelines described in this checklist. <ul style="list-style-type: none"> <li>• Not for bus/shuttle stops that are located outside of new bus transit center.</li> </ul>

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			Customer Information
Yes	No	N/A	
			<b>Regional Transit Information (RTIC)</b>
4	2		<b>26.</b> Transit information in Regional Transit Information Display Cases is accurate and easy to read. <ul style="list-style-type: none"> <li>• RTIC is good but some information is out of date.</li> <li>• Cases are not well maintained.</li> <li>• Need better identification from parking lots.</li> </ul>
4	1		<b>27.</b> Transit operator and route maps for the nine-county San Francisco Bay Area are posted in the Regional Transit Information Display Cases. <ul style="list-style-type: none"> <li>• Inconsistent organization and look. Needs to be improved and redesigned.</li> </ul>
			<b>Local Transit Information</b>
4	1		<b>28.</b> Hub specific information is provided in a case adjacent to the Regional Transit Information Display Case and at other critical locations at the hub. <ul style="list-style-type: none"> <li>• Only available at RTIC. Need other locations in the hub.</li> </ul>
5	0		<b>29.</b> Hub layout maps are provided in the hub information display case. <ul style="list-style-type: none"> <li>• Hub layout maps exist but are not complete.</li> <li>• This needs improvement and other locations.</li> </ul>
4	1		<b>30.</b> Map of hub vicinity with landmarks and attractions is posted in the hub information case. <ul style="list-style-type: none"> <li>• Need more information installations in the hub.</li> </ul>
3	2		<b>31.</b> Posted transit information (i.e. maps, schedules) is well maintained, accurate and easy to find. <ul style="list-style-type: none"> <li>• Information is posted in a convenient central location but is not included at every bus stop.</li> <li>• No map of Samtrans service at bus stops.</li> <li>• Appearance of RTIC could be improved to make it easier to read.</li> </ul>
3	3		<b>32.</b> Schedules, fare, transfer information and hub layout maps are located near bus stops and loading platforms. <ul style="list-style-type: none"> <li>• Many schedules but no hub layout maps.</li> </ul>
0	2	3	<b>33.</b> Printed schedules and maps distributed at the hub contain accurate information and are consistent with the information provided in the Regional Transit Information Display Cases.

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			Real-Time Signage
Yes	No	N/A	
			Existing Real-Time Signage
0	5		<b>34.</b> Real-time signage is provided at the hub. <ul style="list-style-type: none"> <li>Variable message signs on the platforms can provide real-time information in the case of service delays.</li> </ul>
			<b>35.</b> Location of signs (indicate on station diagram).
			<b>36.</b> Description and photo of signage types.
			<b>37.</b> Identification of transit services included on real-time signage (Include operator and mode).
			Future Real-Time Signage Installations
			<b>38.</b> Describe location(s) for future real-time signage locations (indicate on station diagram). Refer to Appendix A Real-Time Technology Guidelines page A-24 <ul style="list-style-type: none"> <li>Provide a real-time installation at the bus transfer facility, in station or breezeway and at train boarding platforms (2 installations-these exist but need to be activated).</li> <li>Add real-time information on Alma Street bus stops once City has completed accessibility improvements on that side of the station.</li> <li>Real-time information could be incorporated into pedestrian tunnel accessibility improvements.</li> <li>Work with Caltrain to activate signs on their platforms.</li> </ul>
			<b>39.</b> Describe transit services that would be included in real-time signage displays. Refer to Appendix A pages A-24-26. <ul style="list-style-type: none"> <li>Next train, next bus, delay information and customer service announcements</li> </ul>